TRANSITION AGREEMENT

BETWEEN THE

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S

GODDARD SPACE FLIGHT CENTER

AND

THE LOCKHEED MARTIN SPACE OPERATIONS COMPANY

CONCERNING TRANSITION OF THE

SPACE NETWORK (SN) WEB SERVICES INTERFACE (SWSI)

March 26, 2002

FINAL DRAFT

1. PURPOSE

This Transition Agreement (TA), hereinafter referred to as the 'Agreement,' defines the relationship and responsibilities of the National Aeronautics and Space Administration's (NASA's) Goddard Space Flight Center (GSFC) and the Lockheed Martin Space Operations Company, hereinafter referred to as the 'Contractor', concerning transition of operations and sustaining support of the Space Network (SN) Web Services Interface (SWSI) from NASA to the Consolidated Space Operations Contract (CSOC) completion form.

2. AUTHORITY, REFERENCES, AND APPLICABLE DOCUMENTS

a. For both NASA and the Contractor, this Agreement is part of the continuing relationship defined by the terms of the Consolidated Space Operations Contract.

b. *Transition Readiness Process*, CSOC-CEN.PO50.001028, May 10, 2000.

c. *Space Network (SN) Web Services Interface (SWSI) System Requirements.*

d. *Space Network (SN) Web Services Interface (SWSI) System Design Specification.*

e. *Collector Project Commitment Document for GSFC Data Services, Revision 1,* April 30, 2001.

f. *Space Operations Management Office Services Catalog,* DRD 2.3 a., April 7, 2000.

g. *Space Network (SN) Web Services Interface (SWSI) Transition Plan*

3. BACKGROUND

The interface between a customer Mission Operations Center (MOC) and the Network Control Center Data System (NCCDS) consist of electronically exchanged formatted messages. New SN customers have traditionally been provided with a limited number of options for implementing this interface. A full-featured SN scheduling tool is provided by the User Planning System (UPS), which runs on a Hewlett-Packard (HP) Unix host. New customers desiring to use UPS for scheduling must either purchase their own system at a significant cost or interface with an institutional UPS located within Goddard Space Flight Center (GSFC) Multi-satellite Operations Control Center (MSOCC). A NASA Integrated Services Network (NISN) Closed Internet Protocol (IP) Operational Network (IONET) connection is required for the latter option. No standard option exists to provide a real-time reconfiguration and performance data monitoring interface. All SN customers have been required to implement their own real-time systems at considerable cost.

Prospective SN customers have brought to light the need for a simple, standard, readily available interface to the NCCDS. In response to this need, the NASA funded an in-house effort to determine the feasibility of such a tool. This effort resulted in a prototype of a web-based cross-platform customer interface to the NCCDS, called SWSI. Prototyping and proof of concept work was completed and has been used to provide support to the Long Duration Balloon Project (LDBP).

The final operational SWSI is a follow-on to the prototype effort and provides improvements in the form of a Graphical User Interface (GUI) and better management of user schedule information. This implementation is being performed on a CSOC Space Operations Directive Agreements (SODA).

The intent of SWSI is to provide SN customers with an interface to the NCCDS from a desktop computer or workstation without the cost of a custom implementation; and to provide access either from the NISN Closed IONET or via the NISN Open IONET. Since the Open IONET allows access from other networks such as the NASA Science Internet and from the public Internet, this will allow use of the SWSI by NASA's university, enterprise, and inter/intra-agency partners.

In addition, the development of the Demand Access System (DAS) requires a corresponding web-based customer interface. The SWSI will seamlessly provide this DAS interface integrated with the NCCDS interface.

The SWSI will be installed and operated at the White Sands Complex (WSC)/Data Services Management Center (DSMC) in mid 2002.

4. SCOPE

This Agreement addresses the transition of responsibility for SWSI operations and sustaining support from NASA to the CSOC completion form, and operational and sustaining support responsibilities subsequent to the transition.

5. TERMS AND CONDITIONS

Both parties understand and accede to the following general terms and conditions governing this

Agreement:

a. NASA/SODA will complete the implementation of the SWSI and bring it to an operational and documented state prior to its transition to CSOC completion form. In accord with the *Collector Project Commitment Document for GSFC Data Services* applicable to the SWSI, CSOC personnel will be involved in various SWSI activities prior to transition to operations. In particular, CSOC personnel will be involved in testing SWSI's functions and interfaces and in documenting Operational and Maintenance (O&M) procedures.

b. NASA will provide the hardware, software, documentation, and training necessary to effect the transition of responsibility for SWSI operations and sustaining support from NASA to the CSOC completion form.

c. NASA will provide funding to the Contractor to cover expenditures for the transition, itself.

d. The Contractor will conduct a transition readiness review. Upon the Contractor's determination that SWSI meets the criteria for acceptance into the CSOC completion form, the Contractor will accept responsibility for the operation and sustaining support of SWSI after the transition readiness review. Since CSOC personnel will have been involved in SWSI testing, separate CSOC acceptance testing of SWSI will not be necessary.

6. TRANSITION RESPONSIBILITIES

a. NASA/GSFC:

(1) Provide identification and supporting information for each hardware Configuration Item (CI) configured within the SWSI. For each hardware CI, this is to include:

(a) Type of component, manufacturer, model number, and serial number.

(b) Purchase order number, and warranty expiration date.

(c) NASA and/or CSOC tag numbers.

(d) Indication of whether CI is unique to SWSI, or is essentially identical to components configured elsewhere within WSC.

(e) Availability of spares at WSC, or other NASA facilities.

(f) Source(s) of replacements.

(2) Provide identification and supporting information for each off-the-shelf software CI that is configured within SWSI. For each off-the-shelf software CI, this is to include:

(a) Product name, vendor, and version number.

(b) List of installed patches.

(c) License number, expiration date, annual cost of license and/or maintenance, and location of license.

(d) Location of documentation.

(e) Associated hardware CIs.

(f) Indication of whether CI is unique to SWSI, or whether the same software product is also configured elsewhere within WSC.

(3) Provide identification and supporting information for each custom software CI configured within SWSI. For each CI, this is to include:

(a) Name and version number.

(b) List of installed patches.

(c) Location of source code.

(d) Associated documentation.

(e) Associated hardware CIs.

(f) Indication of whether CI is unique to SWSI, or whether essentially the same software CI is also configured elsewhere within WSC.

(4) Provide identification and supporting information for any special tools applicable to SWSI, and not used elsewhere within WSC. Applicable special tools may include but are not limited to:

(a) Hardware monitoring, or test, devices.

(b) Software development tools.

(c) Software test tools.

(5) Provide identification and supporting information for each SWSI document CI. For each document CI, this is to include:

(a) Name, number, revision level, and date.

(b) Form (i.e., electronic or hardcopy) and location (i.e., on-line URL or library)

(6) Provide information that fully characterizes the baseline operational state of the SWSI. This information should be included within one or more of the above document CIs such as test reports, user guides and operations procedures. If it is not, this information is to be

provided separately.

(7) Provide training in the use and maintenance of all hardware and software CIs that are unique to SWSI and that are not thoroughly familiar to CSOC personnel.

b. CSOC SODA Task:

(1) Prepare a SWSI Transition Plan. This will consist primarily of a plan outlining the transition processes and will include a schedule for the NASA and vendor(s) to provide the items listed above.

(2) Prepare a preliminary SWSI Subsystem Transition Readiness Report. This will consist primarily of compilations of the information to be provided by NASA as listed above.

(3) Conduct a SWSI Transition Readiness Review. This will verify the completeness and accuracy of the preliminary Transition Readiness Reports, and determine whether the SWSI meets the criteria for acceptance into the CSOC completion form.

(3) Finalize the Transition Readiness Reports based on comments from the Transition Readiness Review.

7. OPERATIONAL AND SUSTAINING SUPPORT RESPONSIBILITIES

CSOC Contractor (Completion Form):

(1) After the SWSI is accepted into the CSOC completion form, the Contractor will operate SWSI in accordance with the approved operations concept, service availability, service performance, and local operating procedures.

(2) After the SWSI is accepted into the CSOC completion form, the Contractor will sustain SWSI in its as-delivered operational state. In general, sustaining support includes repair or replacement of SWSI hardware components as needed. It is understood that additional NASA funding will be required for functional upgrades of SWSI.

8. OFFICES OF PRIMARY RESPONSIBILITY

Both parties to this Agreement have designated Offices of Primary Responsibility (OPRs) for administrative and technical management of the terms contained herein, as follows. (Active coordination personnel are specified in Addendum A.)

a. NASA/GSFC
Space Operations Project, Code 452
NASA Goddard Space Flight Center
Greenbelt, MD 20771

b. CSOC
GSFC CSOC Program Office
Goddard Corporate Park
7515 Mission Drive
Seabrook, MD 20706

9. FINANCE AND PROPERTY MANAGEMENT

a. Funding documentation and remission of funds shall be coordinated with the offices cited below. (Active coordination personnel are specified per Addendum A.)

(1) NASA/GSFC
Mission Services Program Business Office
Code 450
Goddard Space Flight Center
Greenbelt, MD 20771

b. Property accountability for the temporary or custodial control of accountable property managed via this Agreement shall be coordinated with the offices cited below. (Active coordination personnel are specified in Addendum A.)

(1) NASA/GSFC
Property Custodian
Code 450.4
Goddard Space Flight Center
Greenbelt, MD 20771

10. LIABILITY

There are no conditions for liability or indemnity associated with the purpose or scope of this Agreement.

11. ASSIGNMENT

Neither party without the expressed, written consent of the other party shall assign this Agreement or any interest arising under it.

12. ADMINISTRATION

a. This Agreement becomes effective on the date of the last signature affixed and shall continue in effect for a period not to exceed known contract end date (December 2008).

b. This Agreement may be modified at any time upon written approval of the signatories. Minor procedural modifications within the overall scope of this Agreement may be executed at the discretion of the respective signatory representatives. Significant changes in the scope or scale of the activities supported via this Agreement shall be administered via separate, bilaterally signed addenda attached to this agreement.

c. This Agreement shall be reviewed annually by both NASA/GSFC and CSOC-PIO, to determine the need for its continuation, modification, or termination.

d. This Agreement may be terminated at any time by mutual consent, or by either party within the framework of CSOC contract. Each party agrees to assist the other during the transition period and on any administration issues that may arise therefrom.

e. No antecedent Agreements or understandings exist for the purpose or scope delineated herein.

f. Specific coordination personnel are expected to change over time. Individuals identified as the initial OPR contacts are specified in Addendum A. The Parties shall provide notification in the event that a specified coordinator is changed with the circulation of an updated Addendum A, as required.

g. The respective OPRs will coordinate an annual review and update of the support requirements, reconcile current year billing balances, and estimate the cost of expenses for the following FY.

13. APPROVAL

This Agreement is effective upon the date of the final counter-signature of the following sponsoring officials:

_____ _____

Keiji Tasaki, Code 452 Date
Space Operations Project Manager
Goddard Space Flight Center

_____ _____

Tom Sardella, Code 583 Date
SWSI Product Manager
Goddard Space Flight Center

_____ _____

John L. Follin Date
CSOC Sustaining Engineering Manager
White Sands Complex

_____ _____

Betzy Tervo Date
CSOC Engineering Manager
Goddard Corporate Park

ADDENDUM A

DESIGNATED COORDINATORS

FUNCTION: Office of Primary Responsibility Contact

a. NASA/GSFC
Space Operations Project
Code 452
NASA GSFC
Greenbelt, MD 20771
ATTN: Mr. Keiji Tasaki
Telephone: (301) 286-9370

b. CSOC
CSOC Engineering
7515 Mission Drive
Seabrook, MD 20706
ATTN: Mrs. Betzy Tervo
Telephone: (301) 805-3047

FUNCTION: Financial Management Contact

a. NASA/GSFC
Mission Services Program Business Office
Code 450
NASA/GSFC
Greenbelt, MD 20771
ATTN: Mrs. Linda Price
Telephone: (301) 286-5459

FUNCTION: Property Management Contact

a. NASA/GSFC
Property Custodian
Code 452
Goddard Space Flight Center
Greenbelt, MD 20771
ATTN: Ms. Diane Rawlings
Telephone: (301) 286-7788
Email: Marie.D.Rawlings.1@gsfc.nasa.gov